

IN THE ABSTRACT:

Please replace the original Abstract with the following:

A stent includes a coiled-up sheet having overlapping inner and outer longitudinal sections extending parallel to a longitudinal axis thereof, and defining a periphery, the coiled-up sheet being unrollable between contracted and enlarged conditions. A plurality of stretchable elements are formed in the coiled-up sheet, the stretchable elements being expandable about the periphery between an unstretched condition to facilitate placement in a delivery device in the contracted condition and a stretched condition to facilitate expansion of the coiled-up sheet to the enlarged condition upon deployment from the delivery device. Preferably, the coiled-up sheet is biased to the enlarged condition, and the stretchable elements are biased to the stretched condition. More preferably, at least one of the biases is provided by a shape memory property of the coiled-up sheet, which is activated by exposing the stent to body temperature.--

IN THE CLAIMS:

Please cancel claims 4, and 46-50 without prejudice, and amend claims 1, 2, 16, 31, and 44 as follows:

1. (amended) A stretchable stent, comprising:
~~a coiled-up sheet having overlapping inner and outer longitudinal sections extending generally parallel to a longitudinal axis thereof, and defining a periphery, the coiled-up sheet being unrollable [expandable] between a contracted condition and one or more enlarged conditions; and a plurality of stretchable elements formed in the coiled-up sheet, the stretchable elements being expandable about the periphery between an unstretched condition to facilitate placement in a~~

delivery device in the contracted condition and a stretched condition to facilitate expansion of the coiled-up sheet to the one or more enlarged conditions upon deployment from the delivery device.

A3
2. (amended) The stretchable stent of claim 1, wherein the coiled-up sheet is at least partially biased to unroll [expand] from the contracted condition towards the one or more enlarged conditions.

Sub C2
16. (amended) A stretchable stent, comprising:

a coiled-up sheet having overlapping inner and outer longitudinal sections extending generally parallel to a longitudinal axis thereof, the coiled-up sheet being expandable between a contracted condition and one or more enlarged conditions, the coiled-up sheet defining a periphery in a plane substantially perpendicular to a longitudinal axis thereof;

a plurality of locking elements extending from the inner longitudinal section for engaging openings in the outer longitudinal section to selectively secure the coiled-up sheet in the one or more enlarged conditions; and

a plurality of stretchable elements formed in the coiled-up sheet, the stretchable elements having a shape memory biased to expand about the periphery from [defining] an unstretched condition towards [and] a stretched condition when exposed to a predetermined temperature.

Sub C3
31. (amended) A method for making a coiled-sheet stent, the method comprising the steps of:

providing a substantially flat sheet defining a length and a width;

forming a plurality of stretchable elements in the sheet, the stretchable elements being expandable along the width of the sheet between an unstretched condition and a stretched condition;
[and]
AS rolling the flat sheet about the width into a coiled-up sheet having overlapping inner and outer longitudinal sections;
constraining the coiled-up sheet with the stretchable elements in the unstretched condition.

Sub C5
44. (amended) A method for deploying a coiled-sheet stent at a target treatment location within a patient's body, the method comprising the steps of:
providing a coiled-sheet stent comprising a temperature-activated shape memory material, the coiled-sheet stent comprising a plurality of stretchable elements having a shape memory defining an unstretched condition and a stretched condition, the stretchable elements being biased to assume the stretched condition when exposed to a temperature at or above body temperature;
providing the coiled-sheet stent in a contracted condition within a distal end of a tubular sheath at a temperature substantially below body temperature with the stretchable elements in the unstretched condition;
percutaneously introducing the distal end of the sheath into a blood vessel of a patient;
advancing the distal end of the sheath to a target treatment location, the coiled-sheet stent becoming exposed to a temperature within the patient of at least about body temperature during advancement, whereby the stretchable elements become biased to assume the stretched shape; and
deploying the coiled-sheet stent at the target treatment location, the coiled-sheet stent at least partially expanding towards an enlarged condition due to the bias of the stretchable elements towards the stretched shape.